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March 5, 1999

HAND-DELIVERED

Ms. Magalie Roman Salas
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Washington, D.C. 20554.

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, FCC 98-309, released November 25, 1998 (Memorandum Opinion and Order, Third Notice of Proposed Rule Making, and Order in ET Docket No. 95-18) -- Reply Comments of Iridium LLC*

Dear Madam Secretary:

On behalf of Iridium LLC, and pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419 (1997), I enclose for filing an original and nine (9) copies of it's Reply Comments in the above-captioned proceeding.

Kindly stamp and return to this office the enclosed receipt copy of the filing designated for that purpose. You may direct any questions concerning this filing to the undersigned.

Respectfully submitted,


Eric T. Werner

Enclosures

cc: Patricia A. Mahoney, Esquire
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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Amendment of Section 2.106 of the)
Commission's Rules to Allocate)
Spectrum at 2 GHz for Use)
by the Mobile-Satellite Service)

ET Docket No. 95-18

To: The Commission

REPLY COMMENTS OF IRIDIUM LLC

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SUMMARY

Iridium's initial comments in this proceeding identified several core principles that Iridium argued should guide the Commission's deliberations with respect to the framework to govern the relocation of BAS and FS incumbents from the sections of the 2 GHz band now allocated for MSS use. Iridium's proposals were intended to reconcile fairly the competing requirements of incumbents and MSS operators by providing for rapid clearance of the 2 GHz MSS spectrum while concurrently protecting the integrity of incumbents' operations.

Iridium's proposal envisions the simultaneous relocation of all incumbents (BAS and FS) on a date certain not later than the third anniversary of the grant of 2 GHz MSS licences. Completion of relocation by this deadline would be facilitated through inter-industry negotiations. In exchange for this rapid relocation schedule, all incumbents who relocated by the prescribed date would be reimbursed for their reasonable costs to do so, and MSS operators would provide adequate assurance that reimbursement funds would be available by contributing to a common fund for this purpose. To allocate the financial burden of relocation fairly, each 2 GHz MSS licensee would be required to contribute to the fund based upon the amount of spectrum made available to it.

A review of the comments filed by other parties in this proceeding reflects the existence of significant support for Iridium's proposals within each of the affected groups. BAS representatives, in particular, supported simultaneous relocation arguing that incumbents' operations cannot technically accommodate a phased transition without significant disruptions. Similarly, these commenters questioned the feasibility of sharing spectrum. FS licensees echoed the same concerns.

Representative of the BAS, FS, and MSS communities also supported the use of inter-industry negotiations as a critical procedural device to avoid the complexities and delays that would necessarily result if negotiations were conducted on an individualized basis between each MSS licensee and each incumbent. Significantly, some parties have even identified potential industry representatives to undertake such negotiations.

Significant support was also expressed for the proposal to fund a relocation pool at the outset of negotiations. In this regard, however, some incumbents' requested to receive reimbursement payments in advance of actually relocating or retuning their facilities. Iridium believes its proposal for MSS operators to make advance deposits of funds into a common relocation account should provide incumbents with adequate assurances that the funds will be available when needed. Accordingly, the incumbents' request for advance payments is unwarranted.

Finally, Iridium believes that the framework for relocation advanced by ICO Services Limited and ICO USA Service Group in their comments fails to accommodate the concerns of 2 GHz incumbents or of other MSS operators in a fair manner. Accordingly, Iridium urges the Commission to reject the ICO parties' proposals.

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by the Mobile-Satellite Service)	

To: The Commission

REPLY COMMENTS OF IRIDIUM LLC

Iridium LLC ("Iridium"), by its attorneys, and pursuant to Section 1.415(c) of the Commission's rules, 47 C.F.R. § 1.415(c) (1997), hereby respectfully submits its reply comments in response to the comments filed concerning the Commission's *Third Notice of Proposed Rule Making* ("Notice"), released November 25, 1998, in the above-captioned proceeding.^{1/}

I. INTRODUCTION

In its comments in response to the *Notice*, Iridium observed that the situation now confronting the Commission presents a panoply of competing needs and interests that must be balanced against one another and accommodated in a fair and reasonable manner while simultaneously achieving a rapid and efficient transition of incumbent licensees from the 2 GHz band.^{2/} Iridium articulated its general support for the

^{1/} Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, FCC 98-309, released November 25, 1998 (*Memorandum Opinion and Order and Third Notice of Proposed Rule Making and Order* in ET Docket No. 95-18) ("Notice"). The summary of the Third Notice of Proposed Rule Making appeared in the Federal Register on December 17, 1998. See 63 FED. REG. 69606 (December 17, 1998). By Order released January 19, 1999, the Chief of the Office of Engineering and Technology extended until March 5, 1999, the date for filing reply comments in this proceeding. See Order, DA 99-179, released January 19, 1999.

^{2/} See Comments of Iridium LLC, filed February 3, 1999, in ET Docket No. 95-18, at 2 ("Iridium Comments").

principles adopted by the Commission to effectuate this transition,^{3/} and continues to accept the Commission's decision that incumbent licensees will be reimbursed for their reasonable out-of-pocket expenses necessary to relocate their systems. However, Iridium also identified the critical, and equally legitimate, expectation of MSS operators that the relocation of incumbents from the 2 GHz band will be completed in an expeditious and competitively neutral manner.^{4/}

To assist the Commission with its present endeavor, Iridium proposed a framework for incumbent relocation that addresses the respective concerns of the various constituent groups in this proceeding fairly, effectively, and with administrative efficiency. Iridium's proposed framework rested on three core principles:

- First, the Commission should establish a date certain for the departure of all incumbent licensees that is no later than three years from the date on which the Commission grants licenses to MSS operators to operate in the band in order to provide MSS operators with the necessary certainty that the band will be clear to accommodate entry in time to meet operators' projected deployment deadlines, and to assure competitive neutrality among MSS operators.
- Second, in exchange for this accelerated relocation schedule, all incumbents that vacate the band by the specified date should be reimbursed for the appropriate cost of retuning or replacing their equipment with comparable facilities to relocate them to new spectrum. By contrast, incumbents who fail to meet this deadline should be deemed to be ineligible for reimbursement.

^{3/} *Id.* at 3. Although some aspiring 2 GHz mobile satellite service ("MSS") providers continue to resist the Commission's decision to require them to reimburse incumbents' costs to relocate to new spectrum, Iridium notes that an increasing number of 2 GHz MSS applicants appear now to agree generally that the Commission's intention to require such reimbursement is appropriate and consistent with past Commission practice. See, e.g., Comments of Constellation Communications, Inc., filed February 3, 1999, in ET Docket No. 95-18, at 6-7 (proposing modifications to the reimbursement framework) ("Constellation Comments"); Comments of the Boeing Company, filed February 3, 1999, in ET Docket No. 95-18, at 2 ("Boeing Comments"); Comments of Globalstar, L.P., filed February 3, 1999, in ET Docket No. 95-18, at 5-6 ("Globalstar Comments").

^{4/} Iridium Comments at 2.

- Third, because all MSS operators share in the benefits of clearing the band, all licensed operators should be required to contribute to a common fund that will be used to reimburse incumbents' relocation expenses. The amount of money contributed by each MSS licensee should be determined on a pro rata basis keyed to the amount of spectrum made available to each MSS licensee.^{5/}

To implement these principles, Iridium urged the Commission to modify its *Emerging Technologies/Microwave Cost-Sharing* procedures to abandon "voluntary" and "mandatory" negotiations between individual MSS operators and incumbents and, instead, permit the MSS community and the various incumbent groups to negotiate the specific terms of relocation collectively on an inter-industry basis.^{6/}

While it may be premature to identify a genuine consensus among the parties concerning the best approach to relocating incumbents in the 2 GHz band, a review of the comments in this proceeding indicates that significant support exists for Iridium's various proposals within each of the relevant constituent groups: BAS incumbents, FS incumbents, and MSS operators. By contrast, the comments also demonstrate the significant problems that would be presented by a "phased" transition plan that fails to recognize the unique conditions created by the ubiquitous nature of MSS operations.

For the reasons that follow, Iridium continues to believe that its proposed plan represents the most fair and effective method for relocating 2 GHz incumbents in a way that affords MSS operators the certainty they need while simultaneously protecting the integrity of incumbent's existing operations. Accordingly, Iridium respectfully urges the Commission to incorporate Iridium's proposals into the final relocation rules to be adopted in this proceeding.

^{5/} See *id.* at 2-3.

^{6/} *Id.* at 6-7.

II. THE COMMENTS OF MSS INTERESTS AND INCUMBENTS ALIKE REFLECT SIGNIFICANT SUPPORT FOR KEY ELEMENTS OF IRIDIUM'S PROPOSAL

Proceeding from the Commission's decision that 2 GHz incumbent licensees are entitled to reimbursement for their reasonable costs to relocate their operations to new spectrum, the relocation framework Iridium advanced in its comments embraced three key elements: (1) relocation of all incumbents (BAS and FS) as of a date certain not later than the third anniversary of the date that MSS licenses are granted; (2) this accelerated transition to be carried out through a process of inter-industry negotiations; and (3) reimbursement payments to incumbents to be secured through up-front contributions by all MSS licensees to a relocation pool, which contributions would be assessed based on the amount of 2 GHz spectrum each MSS licensee has available to it. As reflected below, the comments of other parties demonstrate that significant support exists for each of these proposals.

A. Relocation of All Incumbents on a Date Certain

As noted in its comments, Iridium supports the Commission's proposal to require simultaneous retuning or replacement of all BAS equipment nationwide on a date certain primarily because it would afford MSS licensees important assurance that their spectrum will be available when it is needed to support MSS operations. Iridium also observed that such an approach would maintain a level playing field for all MSS operators by making spectrum available to all potential MSS competitors at the same time.^{7/}

^{7/} *Id.* at 3-4.

Several other commenters also supported the Commission's proposal in this regard.^{8/} Notably, Globalstar, in its discussion of the proposed sunset date for BAS operations, echoes Iridium's comments. Specifically, Globalstar appears to note with approval the Commission's view "that the most efficient method to relocate (or retune) BAS stations is to pick a date certain on which all BAS stations must come into compliance with the new channelization plan."^{9/}

Representatives of BAS interests also support simultaneous transition on a date certain. For example, the Society of Broadcast Engineers ("SBE") observed that the ubiquitous nature of MSS service and the need for MSS customers to be able to use their handsets "anywhere they want" are incompatible with a market-by-market, or geographically-based transition plan phased-in while MSS service is being deployed.^{10/} According to SBE, such a phased-in transition would be "doomed to fail."^{11/}

The Association of Maximum Service Television and the National Association of Broadcasters ("MSTV/NAB"), in their joint comments, also expressed the view that sharing between MSS and BAS is not technically feasible.^{12/} As a consequence, they

^{8/} See Globalstar Comments; Comments of the Society of Broadcast Engineers, filed Feb. 3, 1999, in ET Docket No. 95-18 ("SBE Comments"); Joint Comments of the Association of Maximum Service Television, Inc., and the National Association of Broadcasters, filed Feb. 3, 1999, in ET Docket No. 95-18 ("MSTV/NAB Comments"); Comments of the Association of America's Public Television Stations, filed Feb. 3, 1999, in ET Docket No. 95-18 ("APTS Comments").

^{9/} Globalstar Comments at 4. Globalstar goes on to observe that "it does not appear feasible to permit BAS licensees to operate pursuant to the current channelization plan after that date." *Id.* Thus, consistent with Iridium's comments, Globalstar asserts that "[a]ny obligation to reimburse individual BAS licensees for relocation costs should sunset as of the nationwide re-channelization date." *Id.*

^{10/} SBE Comments at 3.

^{11/} *Id.*

^{12/} MSTV/NAB Comments at 3-4. The joint comments of MSTV/NAB were among the most
(continued...)

further stated, the global (*i.e.*, ubiquitous) nature of MSS service will make it impossible “for MSS providers to relocate BAS incumbents on a licensee-by-licensee or market-by-market basis. Before an MSS system is launched, all BAS incumbents will need to be out of the spectrum.”^{13/}

While some other parties support a phased transition of BAS licensees out of the 2 GHz band,^{14/} it appears that these views rest largely upon perceived economic or logistical problems related to a simultaneous retuning of all BAS licensees. Proponents of a phased transition do not address the apparent technical imperatives that necessitate fixing a date certain for the simultaneous transition of all BAS incumbents.

In any event, it also appears that the date proposed by Iridium for such a simultaneous departure of incumbents from the band -- *i.e.*, the third anniversary of MSS licensing -- would satisfy the timing concerns of all interests. Assuming that the Commission grants MSS licenses this year, Iridium’s proposal would result in complete relocation of incumbents from the band by sometime in 2002, earlier than most other

^{12/} (...continued)

substantial submissions from the broadcast community, and, in many respects, the views expressed by these parties are in harmony with Iridium’s positions. In this regard as well, Iridium agrees with MSTV/NAB’s view that sharing between BAS and MSS is not practicable. Iridium also shares the skepticism of some FS licensees about the feasibility of sharing between MSS and FS facilities. See Comments of the Association of American Railroads, filed Feb. 3, 1999, in ET Docket No. 95-18, at 4-8 (“AAR Comments”).

^{13/} *Id.* at 7. MSTV/NAB also observed that the nature of BAS operations themselves also necessitates simultaneous relocation of BAS licensees. Specifically, BAS licensees are licensed to use the entire range of spectrum allocated to the BAS service, and licensees’ collective use of the spectrum is managed on a daily basis by local frequency coordinators. Accordingly, MSTV/NAB asserts, it would “not [be] possible for some licensees to operate in the current 120 MHz channel plan and others in the new 85 MHz plan because channels would overlap and interfere with one another.” *Id.* at 7-8.

^{14/} See, *e.g.*, Constellation Comments at 4; Boeing Comments at 5-6.

proposals now before the Commission.^{15/} Indeed, even ICO Services Limited ("ICO") proposes a sunset date that would not occur until January 1, 2005.^{16/}

In its comments, Iridium urged the Commission to require FS licensees to meet the same deadline for relocating from the 2 GHz band as it requires BAS licensees to meet.^{17/} Specifically, Iridium asserted that the same characteristics of MSS service that warranted this approach for BAS incumbents were equally relevant for FS incumbents.^{18/} Generally, commenters representing FS incumbent interests did not address the simultaneous relocation proposal. This is likely due to the fact that the Commission only raised the issue in the BAS context. However, at least one FS incumbent, the American Petroleum Institute ("API"), also acknowledged the point made by SBE and MSTV/NAB that "MSS is a national service which will necessitate the relocation of FS incumbents on a nationwide basis."^{19/} Likewise, the Association of

^{15/} For example, Constellation's proposed sunset date would fall sometime between 2005 and 2007. See Constellation Comments at 5. *But see* SBE Comments at 5 (earliest date for the transition could be June 1, 2001). MSTV/NAB, like Iridium, propose a single, mandatory negotiation period to precede the prescribed relocation date; however, these commenters propose that the negotiation be only two years long rather than the three years suggested by Iridium. See MSTV/NAB Comments at 16. While Iridium would welcome the opportunity to obtain access to the spectrum on the earlier schedule proposed by MSTV/NAB, it is concerned that two years will provide inadequate time for complete negotiations on the terms of the transition and for manufacturers to produce the equipment necessary to effectuate the relocation. Iridium believes that the four to six year period requested by some commenters for the completion of negotiations is entirely unwarranted and incompatible with the need for expeditious clearing of the band. See Joint Comments of Cosmo Broadcasting Corporation; Cox Broadcasting, Inc.; Media General, Inc.; and the Radio-Television News Directors Association, filed Feb. 3, 1999, in ET Docket No. 95-18, at 7-9 ("Joint Comments").

^{16/} See Comments of ICO Services Limited, filed Feb. 3, 1999, in ET Docket No. 95-18, at 5 ("ICO Comments").

^{17/} See Iridium Comments at 8.

^{18/} *Id.*

^{19/} Comments of the American Petroleum Institute, filed Feb. 3, 1999, in ET Docket No. 95-18, at 6 ("API Comments").

American Railroads ("AAR"), another FS incumbent, asserted that sharing between MSS entrants and FS incumbents is infeasible.^{20/} Thus, it is clear that relocation of FS incumbents will present many of the same logistical problems that BAS does, dictating that FS licensees be subject to the same relocation scheme as BAS licensees.

B. Use of Inter-Industry Negotiations

In its comments, Iridium also observed that "the ubiquitous, nationwide characteristics of the service MSS operators expect to provide create unique circumstances that did not exist for the personal communications service ("PCS") licensees when the *Emerging Technologies* framework was first developed" and that, accordingly, "some modest modifications to that framework" were necessary.^{21/} One particular change Iridium proposed was to abandon the scheme of "voluntary" and "mandatory" negotiations between individual incumbents and individual emerging technology entrants (in this case, MSS operators) and, instead, permit incumbents and new entrants to hammer out the particulars of the relocation plan on a collective basis through inter-industry negotiations.^{22/}

Many commenting parties, including MSS, BAS, and FS interests, share Iridium's view that the *Emerging Technologies/Microwave Cost-Sharing* relocation principles must be appropriately modified to respond to the unique nature of MSS.^{23/} Several of

^{20/} AAR Comments at 4.

^{21/} Iridium Comments at 3.

^{22/} *Id.* at 6-7.

^{23/} See, e.g., Globalstar Comments at 2 (stating that the *Emerging Technologies* relocation rules were designed for a "completely different scenario" because PCS licensees had rights to exclusive spectrum in exclusive geographic areas, while 2 GHz MSS licensees are likely to share spectrum as well as a national service area); Comments of TMI Communications and Company, (continued...)

these parties have also specifically advocated for the benefits of collective negotiations among representatives of the affected industry groups.^{24/} Indeed, MSTV and NAB have expressly offered to serve as the representatives of the BAS community.^{25/} Likewise, UTC has offered to be of assistance relative to the FS industry and might be prevailed upon to serve as that industry's representative.^{26/} Although no single entity has as yet been identified to represent the MSS community in such talks, should the Commission ultimately decide to adopt inter-industry negotiations, a consortium consisting of members of each of the MSS applicants licensed by the Commission could be formed to undertake this responsibility.

As Iridium noted at the outset, the challenge facing the Commission in this proceeding is to develop a relocation framework that will facilitate timely, unencumbered access to the 2 GHz band for MSS operators while also safeguarding the integrity of incumbents' operations. As the foregoing comments demonstrate, the

^{23/} (...continued)

Limited Partnership, filed Feb. 3, 1999, in ET Docket No. 95-18, at 4 ("TMI Comments") (*Emerging Technologies* rules not a good model for this proceeding because of differences between PCS and MSS licensees); UTC Comments on Third Notice of Proposed Rulemaking, filed Feb. 3, 1999, in ET Docket No. 95-18, at 4 ("UTC Comments") ("[A]pplication of the relocation rules . . . could be more complex than in the lower 2 GHz band . . . [d]ue to the intricacies of introducing MSS into a band with thousands of incumbent systems . . .").

^{24/} See Boeing Comments at 2-3; MSTV/NAB Comments at 13-15; APTS Comments at 5-6; see also UTC Comments at 5 ("UTC reiterates its willingness to work with the MSS industry to develop industry-backed solutions to address the complexities of relocating incumbents from the 2 GHz band" including the development of clearinghouses to assist in the process."). In a similar vein, SBE suggests that the Commission designate the NAB as transition plan administrator. See SBE Comments at 6. While Iridium has no objection to negotiating with the NAB as the designated representative of the BAS industry, Iridium believes that any central clearinghouse organization or transition administrator should be an organization independent of any of the affected parties with sufficient technical expertise to serve as a facilitator and an "honest broker" among the negotiators.

^{25/} MSTV/NAB Comments at 13.

^{26/} UTC Comments at 5

first goal -- timely clearance of the 2 GHz band by a date certain -- cannot be achieved without coordinated negotiations on an industry-wide basis.

Moreover, with as many as nine possible 2 GHz MSS licensees, more than 1,500 BAS licensees,^{27/} and hundreds of FS licensees,^{28/} individualized negotiations between each MSS licensee and each affected incumbent would consume countless hours and entail substantial (and in many cases unnecessarily duplicative) transaction costs. The resulting morass would almost certainly delay the relocation process and impede the timely roll out of MSS service.

By contrast, industry-wide discussions will provide a very efficient vehicle for resolving many of the difficult relocation problems identified in the comments.^{29/} As Iridium observed in its comments:

[s]uch negotiations could be used to resolve on a consensus basis such issues as: the sequence in which incumbents operating in various segments of the band will migrate to their new spectrum; timetables for the relocation of various incumbent groups; and

^{27/} According to MSTV/NAB, there are 1,569 commercial and non-commercial television stations alone, each of which, on average, owns 4.3 BAS transmitters and 3.3 BAS receivers. See MSTV/NAB Comments at 14 n.23, and authorities cited therein. This figure evidently does not include the Cable Television Relay Service or the Local Television Transmission Service licensees that also use BAS spectrum.

^{28/} One commenter on behalf of FS incumbent interests, API, alone has a membership of more than 300 companies involved in various sectors of the petroleum and natural gas industries. See API Comments at 2.

^{29/} For example, although it evidently believes that the *Emerging Technologies/Microwave Cost-Sharing* model can work with appropriate modifications, Globalstar expresses uncertainty as to how the Commission can create an efficient and effective relocation process in light of what it asserts are "competing incentives which could impede the process." Globalstar Comments at 9. In this regard, Iridium respectfully submits that many of the problems identified by Globalstar could be largely avoided by adopting the relocation model Iridium has proposed. Inter-industry negotiations, a reimbursement pool funded up front by all MSS licensees, and a date certain for all incumbents to relocate would seem to eliminate many of the difficulties that arise from a framework that depends on payments tied to the sequence and timing of MSS licensees' entry into the market and the actual interference they may or may not cause for individual incumbents.

questions concerning the most appropriate method for effectuating the relocation (e.g., retuning or replacement of equipment)."^{30/}

The concern raised by UTC regarding who bears responsibility for relocating paired microwave links,^{31/} for example, also becomes moot in the context of such negotiations because the discussions presuppose that all incumbent facilities will be relocated to clear the band entirely.^{32/} Similarly, industry-based negotiations would also serve as a useful forum to discuss and develop technical standards for the replacement equipment necessary to operate in the incumbents' new spectrum.

As the foregoing discussion demonstrates, collective inter-industry negotiations would be a far more efficient and effective approach to achieve the Commission's ultimate goals in this proceeding than would the historic model of "voluntary" and "mandatory" negotiations between particular new entrants and incumbents.

Accordingly, the Commission should appropriately modify its *Emerging Technologies/Microwave Cost-Sharing* framework in this proceeding to provide for such negotiations.

C. Amount and Manner of Assessing MSS Operators' Reimbursement Obligations

Finally, in its comments, Iridium proposed that the Commission's relocation rules for the 2 GHz band require each MSS licensee to share the cost of clearing the band in

^{30/} Iridium Comments at 7.

^{31/} See UTC Comments at 6.

^{32/} Such inter-industry negotiations should also alleviate the concern expressed by some BAS and FS licensees that individual MSS licensees would have an incentive to delay relocating them until after the sunset date in order to avoid reimbursement obligations. See APTS Comments at 7-8; AAR Comments at 8-9.

proportion to the amount of spectrum it has available.^{33/} Iridium asserted that creation of a common fund would provide incumbents with adequate assurance that their reasonable relocation costs will be recovered to encourage them to move forward with relocation on the accelerated schedule that Iridium proposed.^{34/}

Iridium notes that Globalstar also supports such an approach, at least as an initial mechanism to address the costs associated with rechannelization of the BAS band. Globalstar acknowledged that the proposal for a nationwide rechannelization date for BAS stations presents a circumstance not contemplated by the existing *Emerging Technologies/Microwave Cost-Sharing* rules.^{35/} Consonant with Iridium's comments, Globalstar asserted that if the Commission decides to require simultaneous relocation of BAS incumbents on a date certain, then it "should consider requiring each MSS licensee to put in an equal share of the cost of BAS rechannelization."^{36/} While Globalstar preferred an equal apportionment of such up-front costs among MSS licensees on the principle that all MSS licensees appear to benefit equally from the clearance of the spectrum, it did acknowledge the possibility of "apportion[ing] this financial pool based on the size of each licensee's uplink frequency assignment."^{37/}

^{33/} Iridium Comments at 3-5.

^{34/} *Id.* at 4-5.

^{35/} *Id.* at 6.

^{36/} *Id.*

^{37/} *Id.* As stated in its comments, Iridium believes that a *pro rata* apportionment of costs based on each licensee's available spectrum is a more equitable approach because of the direct correlation between a licensee's available spectrum and the capacities of its system. Those who receive more spectrum should bear a commensurately greater burden to clear it of incumbents. See Iridium Comments at 5.

The proposal for up-front contributions to a pool of funds to reimburse incumbents would alleviate the concern expressed by incumbents that would seek payment in advance. For example, SBE suggests that "it would be prudent to require [MSS] entities to fund [the rechannelization] in advance" to avoid a default by MSS operators in the midst of a 'phased-in' approach.^{38/} Similarly, APTS contends that MSS operators should be required to reimburse displaced BAS incumbents for their relocation costs "prior to the BAS licensees incurring such costs."^{39/} MSTV/NAB also advanced this position in their comments.^{40/}

As its comments made clear, Iridium has consistently acknowledged in this proceeding incumbents' rights to appropriate reimbursement of their reasonable expenses to migrate to new spectrum. Although Iridium would obviously prefer not to have to bear such costs, it recognizes that payment of such reimbursement is a necessary exchange for obtaining rights to spectrum heretofore occupied by other services and is consistent with Commission precedent. However, Iridium believes that a requirement that MSS operators "reimburse" incumbents for relocation costs that they have not yet incurred is both unnecessary and unwarranted.

While MSS operators should be prepared to pay the reasonable expenses that incumbents actually incur to relocate to comparable facilities, they should not be required to pay any amount in excess of those costs. Yet that is precisely what is likely

^{38/} SBE Comments at 4. SBE echoes a concern expressed by BST, Inc., in its comments that incumbents receive payment for their relocation costs in advance of actually relocating to prevent incumbents from being left "holding the bag" if an MSS licensee defaults on its obligations. Comments of BST, Inc., filed Feb. 3, 1999, in ET Docket No. 95-18, at 11.

^{39/} APTS Comments at 7. In addition, APTS urges the Commission to "prohibit any reimbursement plan that involves installment payments for relocation expenses" *Id.*

^{40/} See MSTV/NAB Comments at 18.

to happen if MSS licensees are required to make advance payment because actual expenses will not be ascertainable until they are incurred. Iridium believes that its proposal to create a common pool of funds in advance of relocation should adequately address the concerns of incumbents without the additional step of making payments for relocation that has not yet taken place. Accordingly, Iridium urges the Commission to reject the incumbents' request for advance payments.

With respect to the criteria to govern the acceptability of replacement equipment, there appears to be general agreement that the Commission should apply a "comparable facilities" standard similar to that presently used in the PCS context.^{41/} To the extent some disagreement remains with respect to whether other particular expense categories should be deemed to be reimbursable or not, Iridium suggests the parties be afforded the first opportunity to resolve these issues in their negotiations. Only in the event that these private discussions fail should the Commission step in to mediate any disagreement that may arise.

III. THE COMMISSION MUST ASSURE THAT ITS RELOCATION REGIME IS FAIR TO INCUMBENTS AND TO ALL 2 GHz MSS LICENSEES, REGARDLESS OF WHEN THEY EXPECT TO BEGIN OPERATIONS

Perhaps the strongest opposition to the Commission's proposals in the *Notice* was registered by ICO Services Limited ("ICO") and, to a somewhat lesser extent, in

^{41/} In this regard, Iridium generally agrees with SBE's position that "any replacements or modifications that simply implement the new band plan . . . without adding new capabilities should be deemed justified and acceptable" but that MSS licensees should not be required to reimburse the incremental cost attributable to enhanced functions or capabilities unless the equipment in question represents the most basic equipment available. SBE Comments at 6.

the separate comments of the ICO USA Service Group ("IUSG").^{42/} In its comments, ICO asserted that:

[t]he Commission's overriding goal in transitioning BAS and Fixed Service ("FS") incumbents out of the 2 GHz spectrum that has been allocated for MSS should be to ensure that MSS providers, such as ICO, that are prepared to begin offering service in the near term, will not be delayed in doing so by the Commission's relocation policies.^{43/}

Iridium is sensitive to ICO's desire for rapid access to the 2 GHz MSS band and, indeed, Iridium shares ICO's hope that the Commission will make this an important priority of this proceeding. However, as its comments and the discussion above demonstrate, Iridium also recognizes that hastening MSS operators' access to the band cannot be the Commission's only (or even necessarily its "overriding") goal. Rather, the Commission's responsibilities as a regulator require it to identify and adopt relocation policies that will accommodate the respective needs and interests of each of the affected licensee groups before it in a manner that is fair and efficient.

Necessarily, the fairness criterion requires not only that the Commission act fairly as between entering MSS operators and each of the incumbent groups, but also that it do so as between early MSS entrants, like ICO, and those MSS licensees that will follow later in time. Iridium believes that the policies outlined in its initial comments, and again herein, achieve this objective and strike an appropriate balance between the competing priorities now vying for the Commission's attention: MSS operators' need for expeditious access to the band is satisfied by relocation of incumbents on an accelerated schedule and incumbents' need for reassurance that sufficient resources

^{42/} For convenience, ICO and IUSG will be referred to collectively herein as the "ICO Parties."

^{43/} ICO Comments at 2.

will be available when needed to reimburse them for their reasonable relocation expenses is protected by MSS operators' immediate commitment of funds. For their part, all MSS operators collectively share in this immediate financial burden on a basis fairly apportioned to reflect each licensee's spectrum assets. Thus, neither early entrants nor those that commence operations later risk being made to bear a disproportionately high share of the relocation cost. For the reasons that follow, Iridium does not believe that the proposals offered by ICO and IUSG are either fair or workable.

A. The ICO Parties' Alternative Relocation Proposal Is Not Workable in the Present Context

As an initial matter, ICO challenges the Commission's now reaffirmed decision to require MSS licensees entering the 2 GHz band to reimburse vacating incumbents for their costs to relocate.^{44/} As noted elsewhere herein, Iridium acknowledges the Commission's decision in this regard as reasonable, fair, and consistent with past Commission precedent. Iridium believes that ICO's challenge to this policy serves no useful purpose and, indeed, may prove to be counterproductive by delaying the adoption of final relocation rules and, thereby, delaying the clearance of incumbents from the spectrum.

In place of the Commission's proposed relocation policies, ICO offers an alternative proposal for moving incumbents out of the band that provides, in part, that "[g]lobal MSS should not pay for spectrum access, whether by auctions, fees or direct

^{44/} See ICO Comments at 2 and Appendix A ¶ 2.

relocation costs to any party . . .^{45/} In addition, the ICO proposal generally calls for the “graduated transition” of BAS and FS incumbents out of the spectrum.^{46/} Aside from the significant departure from the Commission’s repeated rulings in this regard, the ICO Parties’ proposal is simply not workable in the instant proceeding. As demonstrated in the comments of MSTV/NAB and SBE, discussed above, the incumbents themselves have made clear that they cannot effectively operate in two separate bands with two distinct channelization plans at the same time. It is for this very reason that these commenters supported the Commission’s proposal for simultaneous retuning of all BAS incumbents on a date certain.^{47/} Accordingly, although the ICO proposal would serve ICO’s own interest in clearing the band more quickly, it would do so at the expense of BAS licensees’ operational integrity.

B. ICO’s Proposals Relative to the *Emerging Technologies/ Microwave Cost-sharing* Model Would Unfairly Advantage ICO at the Expense of Competing MSS Providers

Asserting that 2 GHz incumbents should not be entitled to receive reimbursement for their relocation expenses, ICO nevertheless submits for the record its additional comments concerning the Commission’s proposed relocation framework. In this context, ICO makes two main points: (1) that MSS providers that can share

^{45/} *Id.* Appendix A ¶ 2 (emphasis added). For its part, although it does not discuss the matter at length, IUSG also advocates in favor of this proposal. See IUSG Comments at 4.

^{46/} *Id.* at 7-8. The proposal also recommends that the Commission place a freeze on all applications for new licenses or modifications of licenses filed after March 14, 1997, and the conditioning of all license renewals issued after that date. *Id.* at 7. As reflected in its comments on the ICO Parties’ most recent petitions for reconsideration in this proceeding, Iridium supports these proposals as reasonable steps to reduce unnecessary relocation burdens on MSS operators.

^{47/} In this regard, IUSG opposed the Commission’s proposal to require simultaneous retuning or replacement of BAS equipment. IUSG Comments at 16. IUSG contends, among other things, that such an approach would be unnecessarily disruptive to BAS operations. *Id.* However, the comments submitted by MSTV/NAB and SBE appear to suggest otherwise.

spectrum should not be required to pay relocation costs; and (2) that each MSS provider should pay relocation costs only for the spectrum that it utilizes (as distinguished from that to which it has access) and cannot share.^{48/} Although each of these contentions may appear reasonable on its face, both positions ignore the fact that ICO is not the only MSS entity proposing to use spectrum in the 2 GHz band. Indeed, multiple MSS systems are proposing to operate in the band, and the band will need to be cleared so that all these systems can be accommodated. No system is inherently designed or better suited to operate in any particular portion of the band (with the exception that regional systems should be placed in spectrum that is allocated only for regional use). Accordingly, the Commission should reject both proposals.

First, ICO's proposal relative to sharing spectrum appears to be a contrived tactical maneuver to impose its share of relocation costs on later MSS entrants without actually sharing spectrum with incumbents. As an initial matter, Iridium has previously expressed the view that sharing of spectrum between MSS operators on the one hand and BAS and FS incumbents on the other is not feasible. That position has now been supported by a wide range of incumbents' comments.

ICO has identified no evidence to substantiate that MSS operators and 2 GHz incumbents will, in fact, be able to share spectrum. Rather, the only ICO proposal of which Iridium is aware in this regard is ICO's suggestion that it be licensed across the entire 70 MHz of 2 GHz spectrum allocated for MSS use and that it conduct its operations "interstitially" with incumbents. Such a plan does not propose to "share" spectrum in the customary sense of the word -- that is, ICO does not intend to conduct

^{48/} ICO Comments at 10-11, 12-16.

concurrent MSS operations in the same frequencies where 2 GHz incumbents are operating. Rather, under its “interstitial” operations plan, ICO would utilize only those unused channels between incumbents’ operations. By seizing this presently unoccupied spectrum, ICO claims to avoid interference to incumbents thereby relieving it of any responsibility to pay for relocation. However, the effect of this approach would be to compel later MSS entrants to negotiate with ICO for shared use of its frequencies, or to encroach upon incumbents’ spectrum, thereby incurring relocation costs. Such a result would inappropriately confer an unearned competitive advantage upon ICO.^{49/}

ICO also opposes the Commission’s proposal to require each MSS licensee to bear relocation costs in proportion to the amount of spectrum in the 1990-2025 MHz band for which it is licensed.^{50/} Instead, ICO proposes that each MSS licensee be individually responsible for the costs to relocate from its assigned spectrum incumbents with whom it cannot share.^{51/}

In its comments, and again herein, Iridium supported an allocation of relocation costs based upon the amount of spectrum available to each MSS licensee. First, Iridium observed that simple fairness dictated such a result because all MSS licensees benefit from clearance of the band, and those with more spectrum (and thus greater system capacity) stand to realize even greater benefits.^{52/} Second, Iridium noted that allocation of the relocation burden in the manner advocated by ICO would also create

^{49/} See Iridium Comments at 5 n.12.

^{50/} ICO Comments at 12-13.

^{51/} *Id.* at 13.

^{52/} Iridium Comments at 5. This is especially true for ICO in view of the fact that the early clearance of the band that would occur under Iridium’s proposal would benefit ICO most as the likely first entrant into the band.

unfair market dislocations because incumbent groups operating in some segments of the band may be more difficult or costly to relocate than others.^{53/} ICO neither effectively refutes these concerns nor explains why its proposal is more fair or reasonable in light of the dislocations it would create.

IV. CONCLUSION

The primary task that the Commission must accomplish in this proceeding is to develop a framework for relocating BAS and FS incumbents from the sections of the 2 GHz band allocated for MSS in a manner that is efficient, reasonable, and that fairly addresses the critical concerns and legitimate needs of each of the affected groups. In its comments, Iridium advanced a plan that achieves these objectives by making appropriate modifications to the Commission's existing *Emerging Technologies/ Microwave Cost-Sharing* model to address the unique circumstances presented by the interplay between MSS operations on the one hand, and FS and BAS operations on the other. Specifically, the three core principles that Iridium has identified, implemented through inter-industry negotiations, safeguard the integrity of incumbent operations while also insuring that all MSS operators will have access to unencumbered spectrum in the reasonably near term. Moreover, the mechanisms for cost allocation advocated by Iridium insure that the framework is fair as among MSS entrants so that no individual MSS operator will bear an unduly high proportion of the costs to relocate incumbents.

As discussed above, the comments received in response to the Commission's *Notice* demonstrate that significant support exists for many elements of Iridium's proposals. Moreover, the fact that this support cuts across industry lines -- including

^{53/} *Id.* at 5 n.12.

representatives from BAS and FS incumbents as well as other MSS operators -- suggests that a consensus may be emerging around Iridium's proposed approach.

By contrast, the proposals advanced by the ICO parties do not adequately balance the competing needs of the various interest groups. Instead, they would advance only ICO's individual interests while sacrificing efficiency and abandoning fairness to both incumbents and other MSS operators.

Accordingly, for the reasons stated in its comments, and again herein, Iridium urges the Commission to incorporate Iridium's proposals into the final incumbent relocation rules in this proceeding.

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I, Bridget Y. Monroe, a secretary for the law firm of Verner, Liipfert, Bernhard, McPherson and Hand, Chartered, hereby certify that I have, this fifth (5th) day of March, 1999, caused a copy of the foregoing "Reply Comments of Iridium LLC" to be served by first-class United States mail, postage prepaid (* or via hand delivery) upon each of the following:

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